AI ASIA PACIFIC
INSTITUTE

2023 Trustworthy Artificial Intelligence

in the Asia-Pacific Region

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About the
AI ASIA PACIFIC INSTITUTE

The AI Asia Pacific Institute addresses the social, legal and ethical risks of artificial intelligence through international cooperation.

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Executive Summary

In 2023, the global artificial intelligence market continues to transform industries and governments worldwide, enabling unprecedented efficiency and connectivity. The global AI market is projected to grow at a remarkable annual rate, driven by increased accessibility and widespread implementation of AI technologies. Notably, the proliferation of generative AI technologies, including models like ChatGPT, Stable Diffusion, Whisper, and DALL-E 2, has been a defining development in the AI landscape, with tremendous potential for text, image, and speech applications.

However, alongside these advancements, there are inherent risks associated with AI adoption, such as disinformation, privacy concerns, and intellectual property issues, including copyright infringement. As a result, governance is imperative to monitor AI development and implementation, balancing its potential benefits while mitigating risks.

Countries in the Asia-Pacific region display varying degrees of readiness for AI governance. Most have developed AI governance through a spectrum that ranges from soft approaches by issuing guidelines and principles for AI and encouraging self-regulation, for example. Few countries have demonstrated a willingness to welcome hard laws, which involve the creation of specific legal frameworks and regulations, imposing accountability in AI.

The choice between soft approaches and hard laws depends on a country's regulatory philosophy, the stage of AI development, and societal concerns. While the European Union stands as a trailblazer, proposing the 'AI Act' recently, the Asia-Pacific region will likely write its own AI governance history. The region is home to some of the world's largest and fastest-growing economies, which are increasingly playing a significant role in shaping the AI industry both as developers and consumers of AI technologies.

AI's continuous growth presents enormous opportunities for the Asia-Pacific region. By establishing robust and forward-looking regulatory frameworks, fostering expertise, and steering public discourse, countries can effectively harness AI's potential while addressing its inherent risks, ensuring a prosperous and sustainable future for all.

Introduction

Artificial intelligence (AI) has continued to revolutionise the way industries operate and governments regulate throughout 2023. The proliferation of generative AI technologies has been one of the defining developments in the AI landscape over the past year, with large-scale models being released monthly throughout the last couple of years.[1]

ChatGPT has been the fastest-growing application to date, reaching 100 million users in two months following its release.[2] Other models like Stable Diffusion, Whisper, and DALL-E 2 have exhibited an expanding range of capabilities, spanning text manipulation, image generation, and speech recognition. These technologies, however, are not without their risks, which can include disinformation, privacy concerns, intellectual property issues including copyright infringement, and bias.[3] Thus, governance is necessary to track the development and implementation of AI systems, mitigating their risks while ensuring their potential benefits.

Valued at USD $136.55 billion in 2022, the global AI market is expected to grow at an annual rate of 37.3% from 2023 to 2030 as AI technologies become increasingly accessible and implemented across society.[4] For countries within and beyond the Asia-Pacific region, harnessing AI technologies, which is best accomplished in conjunction with a regulatory framework to mitigate the potential risks of emerging technologies, is a pivotal opportunity to drive growth. However, not all countries in the Asia-Pacific are equally placed to do this. Oxford Insight's 2022 *Government AI Readiness Index* indicates that the region has both 'leaders and laggards in AI regulatory governance'.[5] Three Asia-Pacific countries, Singapore, South Korea, and Australia, ranked among the top 10 countries in terms of their governments' readiness to implement AI in the delivery of public services.[6] Meanwhile, other countries were identified as being in far weaker positions to support the widespread AI adoption. Cambodia, for example, was ranked 132 out of the 181 studied countries.[7]

As governance in AI develops worldwide to mitigate AI's potential risks, patterns in regulatory approaches are emerging. Some analysts view the regulatory landscape as characterised by 'holistic and hard-law based' approaches on the one hand and 'sector-specific and soft-law based' approaches on the other.[8] Moreover, it appears that promoting the adoption of AI technologies typically comes before these technologies are comprehensively regulated. For this reason, developed countries may implement AI regulations before developing countries, potentially underscoring the crucial necessity for the cross-border exchange of practices and knowledge.

This report is the third in the AI Asia Pacific Institute's annual series examining the state of "Trustworthy Artificial Intelligence in the Asia-Pacific Region".[9] It explores the landscape and recent developments of AI governance across the Asia-Pacific, this time including additional Southeast Asian countries and attempting a more concise regional overview. The Asia-Pacific region has witnessed significant growth in AI adoption. Countries like China, Japan, South Korea, and Singapore have made substantial investments in AI research and development, leading to the rapid deployment of AI technologies in areas such as manufacturing, finance, healthcare, and transportation. The region is also actively engaging in discussions about AI's ethical, social and regulatory challenges. Countries are formulating policies and regulations to address concerns related to data privacy, algorithmic bias, and further supporting trustworthy artificial intelligence (Trustworthy AI)[10].

Australia

Australia

Australia has demonstrated a clear commitment to the responsible development and implementation of AI systems. In 2019, the Department of Industry, Science and Resources (DISR) released the AI Ethics Framework, a voluntary framework aligned with public consultations and international initiatives, such as the Global Partnership on Artificial Intelligence and the EU's Ethics Guidelines for Trustworthy AI.[11] Central to the AI Ethics Framework are eight principles to ensure 'safe, secure and reliable' AI, which include fairness; privacy protection and security; and accountability.[12]

Australia's current approach to regulating emerging AI risks relies on a combination of general and sector-specific regulations, as well as voluntary initiatives. In June 2023, Australia's regulatory landscape and objectives concerning AI regulations were outlined in DISR's discussion paper, *Safe and Responsible AI in Australia.*[13] While no comprehensive laws regulating AI in Australia exist at the time of writing, AI is regulated indirectly through existing laws like the *Privacy Act 1988* (which has undergone review to ensure that regulations are fit for purpose in the digital era[14]) and sector-specific laws like the *Therapeutic Goods Act*.[15] For example, the Office of the Australian Information Commissioner had already used its powers under the *Privacy Act* to take action against Clearview AI for using people's photos scraped from social media without permission.[16]

Importantly, the *Safe and Responsible AI in Australia* paper does not provide a comprehensive analysis of all Australian laws that are applicable to AI. Rather, it identifies potential lacunae in the existing regulatory framework while proposing mechanisms to support safe and responsible AI practices.[17] Ultimately, the discussion paper aims to obtain public input to improve the Australian Government's approach to regulating AI in a manner that promotes public trust in the development and use of AI systems. Looking to the future of Australia's regulatory developments, DISR noted that '[a]s a relatively small, open economy, international harmonisation of Australia's governance framework will be important as it ultimately affects Australia's ability to take advantage of AI-enabled systems supplied on a global scale and foster the growth of AI in Australia'.[18]AI in higher education has been a particularly significant topic of discussion in government deliberations regarding the reform of the higher education sector in Australia this year.

Brunei Darussalam

Brunei Darussalam

Brunei is still in its early stages of governing and investing in AI. The Government of Brunei has yet to publicly announce a national AI strategy. However, its 2021 Economic Blueprint[19] articulates six aspirations that form part of the nation's vision for institutional reforms and economic prosperity. A crucial aspiration is leveraging technology and innovation, enabling a productive business environment.

In line with encouraging national digital development, Brunei recognises the importance of public–private partnerships. One notable initiative is 'Teens in AI', a collaboration between Darussalam Enterprise (DARe) and Acorn Aspirations, a UK-based enterprise. This partnership aims to promote grassroots knowledge and skills related to AI, machine learning, and big data. Another collaboration is with Singaporean company MyFinB's Centre for AI Innovation, which provides training and consultancy programmes to improve the local integration of AI systems into business operations.[20]

While the Government of Brunei has not introduced specific AI regulations, they have introduced various national policies aimed at enhancing the country's digital ecosystem.[21] The Digital Economy Masterplan 2025 seeks to transform Brunei into a Smart Nation, identifying four 'strategic thrusts': industry digitalisation; government digitalisation; a thriving digital industry; and talent development.[22] The Masterplan explicitly recognises that a 'Whole of Nation' approach is needed, requiring participation from industry members, academia, and end-users of new technologies.[23]

The Authority for Info-Communications Technology Industry of Brunei Darussalam is currently in the process of formulating a new Personal Data Protection law, which is intended to govern the 'acquisition, utilisation, and disclosure of personal data by private entities.'[24] The implementation of this law may shed light on the degree to which Brunei's regulatory standards align with those of other jurisdictions.

Cambodia

Cambodia

Cambodia has various ongoing initiatives and policies aimed at promoting the adoption of emerging technologies. However, similar to other regional countries, it lacks specific regulations governing AI. The Cambodian ICT Masterplan 2014–20 (ICTopia Cambodia), the Telecom-ICT Development Policy 2020, the Policy and Strategies on Information and Communication Technology in Cambodia (2004), the E-government Master Plan (2017–22), and the National ICT Policy form some of Cambodia's recent policy developments relating to technology. In 2021, the Cambodian Government released the 'Cambodia Digital Economy and Society Policy Framework 2021–2035.' This framework outlines both short-term and long-term strategies aimed at boosting infrastructure investment and fostering the application of AI in data governance, particularly in the realms of data utilisation and analysis.[25]

A significant recent development in Cambodia is the 'AI Landscape in Cambodia: Current Status and Future Trends' report,[26]published by the Ministry of Industry, Science, Technology and Innovation in May 2023. This is the first report specific to the AI industry in Cambodia, written to grasp the development and use of AI technologies in the national context. In this way, the report could be viewed as a prelude to further developments in AI governance. The report notes the need for consensus on AI's guiding principles for AI, listing various concerns for 'any future policy or law governing the use of AI, such as privacy, accountability, and promotion of human values'.[27]

Cambodia is in the early stages of AI development; the government aims to strengthen AI infrastructure and readiness by introducing initiatives like open-source AI communities, university AI courses, and business digital platforms.[28] The Ministry of Industry, Science, Technology and Innovation is leading efforts to define focus areas, establish regulations, develop infrastructure, promote research and education, nurture the AI ecosystem, and encourage international collaborations.[29]

China

China

China has accelerated its efforts to govern AI, favouring a top-down approach characterised by significant government intervention. Rather than implement a single comprehensive instrument, the Chinese Government has implemented a range of regulatory measures. In 2022, China was the second largest nation in terms of private AI investment and led globally in AI journal, conference, and repository publications.[30] To stimulate responsible innovation in AI technologies, local policies have been implemented in Shanghai[31] and the Shenzhen Special Economic Zone,[32] since October and November 2022, respectively. Under both policies, the municipalities are responsible for developing standards to guide the responsible development of the AI industry.[33] Further, both regulations impose an obligation on the municipalities to establish AI ethics expert committees, which must conduct risk assessments for AI systems and establish guidelines for ethical AI practices.[34]

On 1 March 2022, the *Provisions on the Management of Algorithmic Recommendations in Internet Information Services* came into force.[35] Like the *Interim Generative AI Measures*, the *Algorithmic Recommendation Management Provisions* seeks alignment with the national cultural and political context. The Provisions provide, among other things, that algorithmic models must not lead users 'to addiction or excessive consumption'; that service providers operating in online news must ensure their systems do not promote fake news; and that special measures must be taken to support older users, including to prevent fraud.[36]

Generative AI systems, one of the largest technological developments in the past year, are regulated in China by the *Provisions on the Administration of Deep Synthesis of Information Services* and the *Interim Measures for the Management of Generative Artificial Intelligence Services*.[37] The *Deep Synthesis Regulations*, which came into force on 10 January 2023, regulates hyper-realistic content, prohibiting the use of deep synthesis services to create or transmit disinformation, or harm the societal public interest, economic or social order, or the lawful rights and interests of others.[38] The *Interim Generative AI Measures*, which took effect on 15 August 2023, aims to ensure that generative AI systems reflect China's core values.[39] Further, it provides that providers of generative AI systems must select training and optimisation data in a manner that respects intellectual property rights and mitigates the risks of bias.[40] Unlike the previous drafts of the *Generative AI Measures*, the *Interim Generative AI Measures* are only intended to cover AI systems that are publicly available in China, meaning that research institutions or systems developed for overseas use are exempted.[41] As the first country to pass specific laws governing generative AI systems, China has further reasserted itself as a leader in the development and regulation of AI systems.

Indonesia

Indonesia

In 2020, Indonesia released the 2020–2045 Artificial Intelligence National Strategy (Stranas KA), which outlines the country's plans to remain competitive in the AI landscape.[42] Aligned with the objectives of Vision Indonesia 2045, Stranas KA is designed to serve as a guiding framework for the long-term development and use of AI in Indonesia. There are four focus areas for Stranas KA: Ethics and Policy Talent Development, Infrastructure and Data, and Industrial Research and Innovation.[43] This report, along with Indonesia's participation in global forums such as the Regional Comprehensive Economic Partnership (RCEP) and ISO/IEC JTC 1/SC 42 AI standards committee, demonstrate its commitment to embracing AI's economic and social benefits.[44]

Stranas KA recommended, among other things, the formation of a data ethics board and national regulations for AI innovation. However, since 2020, however, Indonesia has yet to implement these recommendations to ensure the responsible use of AI.[45] Additionally, a few risks related to AI are currently overseen by the *Electronic Information and Transactions Law,* considering that AI arguably falls under the scope of an 'electronic agent', being 'an automated electronic means that is used to initiate an action to certain Electronic Information, which is operated by Persons'.[46]

Key bodies within Indonesia's AI landscape include the National Research and Innovation Agency (BRIN) and the Artificial Intelligence Research and Innovation Collaboration (KORIKA). Recently, KORIKA announced a partnership with OpenAI that aims to develop an AI system that aligns with Indonesian values. The announcement referred to principles of human-centricity and fairness.[47] Based on Indonesia's commitment to human rights in their proposed privacy and data protection laws,[48] future proposals for AI governance and potential regulation can be expected.

Japan

Japan

Japan has taken a lighter stance on regulating AI, emphasising the importance of not stifling innovation. The regulatory approach has been described by Hiroki Habuka, Senior Associate of the Wadhwani Centre for AI and Advanced Technologies, as favouring 'risk-based, agile, and multistakeholder process, rather than … one-size-fits-all obligation or prohibition'.[49] Certain sector-specific regulations include transparency and fairness measures for large platforms under the *Digital Platform Transparency Act*; and an obligation under the *Financial Instruments and Exchange Act* to establish risk management systems for businesses engaging in high-speed algorithmic trading.[50]

In July 2023, Reuters reported that the Japanese Government seeks to use AI technologies to boost their economic growth and status as a producer of advanced chips, and is consequently taking a softer regulatory approach than jurisdictions like the EU.[51] The 'Social Principles of Human-Centric AI' (Social Principles), published in 2019, outline the goal of using AI to bolster human dignity, diversity and inclusion, and sustainability.[52] To elevate these outcomes in Japan, the Social Principles claims that AI technologies must be, among other things, human-centric; understood by its users; sufficiently protective of its user's personal data; and grounded in considerations of fairness, accountability and transparency.

Despite the promulgation of the Social Principles, there are no comprehensive regulations governing AI systems. In July 2021, the Ministry of Economy, Trade, and Industry (METI) stated that 'legally-binding horizontal requirements for AI systems is deemed unnecessary at the moment' and that future discussions of requirements for AI systems should consider 'not only risks but also potential benefits'.[53] While the METI acknowledged that AI systems can pose various risks, there was a clear concern that regulations would not only fail to control these risks but also hinder the development of innovations. To this end, Japan's Government—like South Korea's—favoured a regulatory framework where the design, monitoring and enforcement of rules is driven by private agents.[54]

In May 2023, Japan's Agency for Cultural Affairs and the Cabinet Office took a contrarian stance concerning AI copyright, declaring that existing laws do not protect copyrighted materials incorporated into AI datasets. These views were clarified in the paper 'Regarding the relationship between AI and copyright',[55] which stated that copyright protects creative expressions but not mere data or ideas. Where the interests of the copyright holder are 'unreasonably impaired', however, their permission may be required under articles 30–4 of Japan's Copyright Act, which permits the free use of copyrighted works to the extent considered necessary where the intended use of such works is not the enjoyment of the ideas or emotions expressed therein.[56]

Malaysia

Malaysia

While the AI regulatory landscape in Malaysia is still in its early stages, the country has taken notable steps to introduce various policies to guide digital transformation and ensure the responsible deployment of AI systems. The Malaysian Ministry of Science, Technology, and Innovation (MOSTI) has played a crucial role in driving progress within this sector. Their contributions include the 2018 National Policy on Industry 4.0 (Industry 4WRD) to guide the country's digital transformation effort,[57] further developed in 2021 with their release of the National 4IR Policy.[58] The Malaysian Prime Minister has noted these policies serve as guiding principles for Malaysia to remain at the forefront of the Industrial Revolution 4.0 (4IR)[59] curve.[60] They specifically highlight the significance of AI ethics, prioritising aspects such as human well-being, fairness, transparency, and accountability in adopting and deploying AI technologies. In 2021, MOSTI also launched the Malaysia AI Roadmap 2021–25, which seeks to improve AI growth, adoption, and cross-sectoral collaboration. [61]

A significant recent development in Malaysia is the 2023 'Responsible AI Framework' developed by the Malaysia Digital Economy Corporation (MDEC), which provides guidelines and principles for organisations to develop and deploy AI systems responsibly.[62] The paper proposes a dynamic approach to developing a suitable AI ethics and governance framework with the goal of maximising AI adoption among diverse stakeholders in Malaysia, such as MOSTI, high-tech companies, researchers, and consumers.

In collaboration with the International Data Corporation (IDC), the MDEC has taken a noteworthy step in advancing AI adoption.[63] Similar to Singapore's recently introduced AI Verify initiative,[64] Malaysia launched the Data, Analytics, and AI Readiness Assessment Tool to enhance the integration of AI models within their country. The tool is aimed at assisting enterprises and organisations in comprehending the value of their assets and effectively deploying data technology. This tool enables optimised operational, tactical, and strategic decisions to overcome challenges and embrace the 4IR. The CEO of MDEC—Surina Shukri—commented that 'this assessment tool, jointly-developed with the global market intelligence firm, will greatly benefit local businesses in their journey towards being 4IR-ready in line with Malaysia Digital Economy Blueprint (MyDIGITAL)'s goal to boost economic competitiveness through digitalisation'.[65]

Furthermore, the Malaysian Government has encouraged collaborations between industry players, academia, and international government agencies to promote research and development in AI ethics. One of these collaborations, for instance, has contributed to further strengthening Malaysia-China trade and investment relations, including through the Regional Comprehensive Economic Partnership (RCEP), which is the main driving force in integrating the regional economy with the use of 4IR technology.[66] This collaboration represents a continuing intergovernmental research initiative between Malaysia and China, specifically focusing on the fields of Science, Technology, and Innovation. Collaborative approaches such as these can foster a comprehensive understanding of the risks of AI technologies and strengthen national governance.

New Zealand

New Zealand

While legislative enforcement may not be fully established within the context of New Zealand's current AI governance landscape, the New Zealand Government has taken a proactive and forward-looking approach to AI regulation. This includes active international collaborations; a strong emphasis on ensuring compliance with privacy laws; and initiatives like the 2020 Algorithm Charter for Aotearoa New Zealand,[67] and the 2022 Digital Strategy for Aotearoa (DSA) combined with the 2022–23 Action Plan for this Digital Strategy.[68] The Charter emphasises the use of complex algorithms to support human decision-making in the New Zealand Government,[69] while the Digital Strategies set out a vision to seize the opportunities present in the digital era. The 2022–23 Action Plan will serve as a dynamic roadmap for the execution of the DSA. This plan includes a 2022–27 Roadmap, which will undergo regular reviews and updates on an annual basis, extending until 2032.

A significant recent development in New Zealand is the introduction of the Industry Transformation Plan (ITP) for Digital Technologies, which outlines a series of measures aimed at expediting the expansion of the country's digital technology sector.[70] Within the ITP, specific initiatives have been categorised into two key areas: 'Immediate Focus Areas' and 'Future Focus Areas'. The latter encompasses endeavours such as developing an AI Strategy intended to enable New Zealand to harness the economic potential of AI in a reliable and responsible manner.[71]

During the Asia Pacific Privacy Authorities forum held in Mexico in June 2023, the New Zealand Privacy Commissioner, Michael Webster, addressed the advancements made in the Information Privacy Technologies (IPT) domain.[72] He emphasised that even though AI is a rapidly evolving technology, existing privacy laws still apply to its use. Mr Webster stated, "[o]ur own law in New Zealand is technology neutral, which means our Act adapts to developments in technology. AI users and developers need to make sure they are compliant with privacy law". The New Zealand Government maintains that the *Privacy Act 2020* extends to cover issues relating to generative AI systems. With these existing laws, regulators can collaborate and ensure organisations adhere to legal requirements concerning artificial intelligence applications.[73]

New Zealand actively participates in international collaborations and discussions on AI governance. It engages with organisations such as the Organisation for Economic Co-operation and Development (OECD) and participates in initiatives like the Global Partnership on AI (GPAI). Through these platforms, New Zealand contributes to the development of global guidelines and standards for AI regulation. Aligned with this global perspective, the Centre for Data Science and Artificial Intelligence was newly launched in June 2023 at Te Herenga Waka – Victoria University of Wellington.[74] The Director of Te Whiri Kawe has expressed the Centre's aspiration to become a global focal point for data science and AI research, while also serving as a national hub for research collaboration, industry engagement, and commercialisation. This collaboration would involve Crown Research Institutes, companies, universities, and government agencies.

Singapore

Singapore

Singapore aims to find a harmonious approach to AI regulation that encourages innovation and safeguards consumer welfare. Its recent AI governance developments have contributed to establishing itself as a benchmark for global AI governance standards.[75] The nation has been at the forefront of pioneering efforts to develop a global Trustworthy AI ecosystem. For Singapore, this began in 2018 with the Model AI Governance Framework (Model Framework) released by the Personal Data Protection Commission (PDPC) and, one year later, with the National Artificial Intelligence Strategy (NAIS).[76] The PDPC is a major part of Singapore's regulatory landscape, overseeing data and AI activities. This includes monitoring AI developers and companies that employ AI, encompassing various aspects such as backroom operations, front-end usage companies, and distributors of AI-equipped equipment.[77]

In May 2023, the Ministry of Communications and Information announced that the Singapore Government intends to release the Advisory Guidelines on the Use of Personal Data in AI Systems within the framework of the *Personal Data Protection Act* by the end of 2023.[78] The Advisory Guidelines have progressed to the stage of open consultation and will provide businesses with greater clarity on the permissible uses of personal data to train or develop AI models.[79][80] The Singapore Academy of Law (SAL) has also significantly influenced the oversight of laws related to AI systems. SAL has released multiple reports addressing various legal aspects influenced by the growing adoption of robotics and AI-driven technologies in society. These reports, such as '*Criminal Liability, Robotics, and AI Systems'* and *'Applying Ethical Principles for Artificial Intelligence in Regulatory Reform',* offer recommendations concerning the AI industry and its impact on different legal domains.[81]

The Singapore Government has placed significant emphasis on the deployment of responsible AI. On 7 June 2023, Singapore's Infocomm Media Development Authority (IMDA) released 'AI Verify', the world's first AI Governance Testing Framework.[82] The primary objective of AI Verify is to assist organisations in verifying the effectiveness of their AI systems by utilising globally acknowledged governance principles and standardised assessments. It draws on the contributions of the global open-source community to improve its AI testing tools. The adoption of Trustworthy AI was also received in 2022 as the Monetary Authority of Singapore (MAS) published a set of five whitepapers outlining evaluation methodologies for fairness, ethics, accountability, and transparency (FEAT).[83] These guidelines are aimed at promoting the responsible utilisation of AI technologies by financial service providers. The MAS initiative aims to encourage collaboration between public and private entities, with the objective of achieving tangible outcomes and enhancing capabilities in the adoption of AI within Singapore's fintech ecosystem.[84]

Singapore advocates for the effectiveness of clear and transparent guidelines regarding cross-border data flows instead of universally implementing rigid data localisation rules. A notable initiative is the collaboration between Google and the IMDA, 'PET x Privacy Sandbox', launched in July 2023. Privacy Enhancing Technologies (PETs) allow businesses to extract value from consumer datasets while ensuring that personal data is protected. This is Google's first partnership in the Asia Pacific with a regulator to support the industry in testing and adopting PETs.[85] This collaboration marks a notable advancement, considering the increasing significance of data in the AI-driven landscape. Singapore's Minister of Communications and Information has praised Indonesia and Thailand on this topic for their progressive approach in enacting legislation that facilitates data transfers across borders.[86]

South Korea

South Korea

South Korea, while still in the process of developing specialised regulations governing AI, has demonstrated its strong commitment to enhancing its regulatory framework through various endeavours. It has established itself as a key participant in international discussions concerning AI regulations, having helped negotiate the OECD AI Principles in 2019[87] and hosted the Asia-Pacific Regional Consultation on the Ethics of AI in 2020.[88]

On 14 February 2023, the Science, ICT, Broadcasting, and Communications Committee of the Korean National Assembly passed legislation to enact the *Law on Nurturing the AI Industry and Establishing a Trust Basis* (the South Korean 'AI Act').[89] Ultimately, the bill was approved as a committee alternative, consolidating AI's support system and ethical principles into a single legislation. The AI Act will be the first law to become a statutory foundation that comprehensively governs and regulates the AI industry in South Korea, emphasising principles of reliability, transparency and safety. Interestingly, at the bill's public hearing on 24 February, it was mentioned that it was preferable to 'nurture' the AI industry through corporate self-regulation rather than government regulation.[90] To this end, private companies and research institutions will be encouraged to establish voluntary ethics committees under the Act and will support the development of ethical guidelines for different industries.

In addition, South Korea's privacy regulator, the *Personal Information Protection Commission* (PIPC), released a draft decree under the *Personal Information Protection Act* for public comment on 18 May 2023.[91] The key proposed changes included enhancing the rights of data subjects concerning the processing of their personal data, centralising regulations concerning the protection of children's personal data, and strengthening the public sector's data protection standards. The PIPC also declared on 31 May 2023 the establishment of a research group of legal experts and leaders in academia and industry.[92] Partly driven by the recent proliferation of generative AI systems, this group will thoroughly examine the country's existing laws to strengthen the safeguards for individuals' biometric information, particularly concerning the processing of data.

Thailand

Thailand

The Thai Government has recognised the importance of Trustworthy AI and has shown a commitment to increasing AI adoption rates and fostering responsible AI practices.

Thailand's first AI ethics guidelines were released in 2019 by the Digital Economy and Society Ministry, with input from Mahidol University and the private sector, Microsoft. These guidelines provided that AI technologies must support Thailand's sustainable development, as well as adhere to principles of fairness and accountability.[93]

In 2022, the Thai Cabinet approved a draft version of the National AI Master Plan 2021–27, which aims to promote Thailand's AI ecosystem and enhance the nation's economy and quality of life.[94] The Master Plan indicates that Thailand seeks to have enforceable laws and regulations concerning AI by the end of 2027, in addition to stronger digital infrastructure and AI innovation. This year marks the beginning of Phase 2 of the Master Plan, which aims to expand research and applications of AI across ten target sectors. Collaboration between private and public agencies is expected to drive AI adoption. One example is the 'Thailand Artificial Intelligence Research Institute', a venture between Visai AI Co Ltd (VISAI) and the Digital Economy Promotion Agency that was announced in April 2022.[95]

A more comprehensive proposal for regulations followed with the release of the draft 'Royal Decree on Artificial Intelligence System Service Business' for public comment in October 2022.[96] The Royal Decree appears to have taken inspiration from other proposed frameworks, such as the *EU's Draft AI Act*, due to its risk-based approach to regulating AI systems. AI systems deemed as higher risk will be subject to greater regulatory scrutiny, with certain systems being prohibitively risky.[97] It is unclear whether the drafting process of the Royal Decree has remedied the issues identified by Hongladarom, which include a lack of genuine public involvement; and failure to inform the populace about the consequences of AI adoption.

The Philippines

The Philippines

The Philippines recognises the importance of governing AI to embrace its benefits while mitigating potential risks. Like other countries in the region, it has a strategic vision to increase AI research, development and adoption. The National AI Strategy Roadmap (the Roadmap), launched by the Department of Trade and Industry (DTI) in 2021, aims to guide stakeholders in the public and private sectors to use AI to improve the productivity of domestic industries and the competitiveness of the Philippines' national economy.[98] Notably, the Roadmap identifies five barriers to AI adoption in the Philippines: a lack of understanding of data science and AI; a lack of knowledge of potential use cases; a lack of resources; a lack of data strategy; and uncertainties about legal and regulatory frameworks for AI.[99]

This year, the House of Representatives proposed Bill No. 7396 for 'An Act Promoting the Development and Regulation of Artificial Intelligence in the Philippines'.[100] The policy behind this bill is stated as promoting AI's development in the Philippines and 'ensuring that its development and deployment are aligned with national priorities, socially responsible, and respectful of human rights'.[101] This policy would be chiefly advanced by a proposed body called the 'Artificial Intelligence Development Authority' (AIDA), which would be responsible for, among other things, developing national regulations; conducting research into activities to promote the advancement of AI in the Philippines; and establishing mechanisms for handling complaints related to the deployment of AI systems in the Philippines.[102]

The widespread adoption of AI systems is not fully supported in the Philippines' political sphere. In May 2023, Senator Imee R Marcos filed a Senate Resolution[103] calling for an inquiry into the impact of AI on job displacement in the business process outsourcing (BPO) and original equipment manufacturer (OEM) sector. In this resolution, Senator Marcos referred to economic predictions that rapid technological innovations will eliminate at least 1.1 million jobs in the Philippines. Therefore, there is an apparent recognition that appropriate governance and specific regulations are required to support citizens in the transition to AI.

Vietnam

Vietnam

Vietnam recognises AI as the background technology of the fourth industrial revolution and is working to allocate resources for its development and implementation accordingly.

[104] As part of the 2019 National AI Strategy, the Government has set ambitious targets, such as bringing Vietnam to a leadership position among other four Southeast Asian countries in the research, development and application of AI. Collaboration between government, industry, and academia has sought to increase AI adoption and development domestically. For example, the Vietnam AI Grand Challenge, launched in 2019, connects policymakers, tech companies and engineers with the aim of developing AI solutions across local industries.[105] As part of its national strategy to increase the domestic application of AI, research centres are being opened across the nation. The International Research Centre for Artificial Intelligence was established in 2021 at the Hanoi University of Science and Technology with the aim of promoting domestic and international collaboration regarding the creation of new AI technologies.[106]

In 2022, the Ministry of Information and Communication (MIC) released the draft 'National Standard on Artificial Intelligence and Big Data' for public comment.[107] This contained two documents concerning standards to govern the quality and robustness of AI systems across their lifespan. Importantly, the standards propose a risk-based approach to regulating AI systems but is currently lacking a 'rigorous risk assessment process or an ethical design framework'.[108] This approach appears to be grounded in principles of safety and mitigating AI biases.

The Government is increasingly exercising governance over social media platforms and its risks, such as offensive material and disinformation.[109] The Ministry of Information and Communications stated that, in the first half of 2023, Facebook and TikTok had removed 2,549 and 415 posts, respectively, pursuant to government requests.[110]

Finally, Vietnam's Personal Data Protection Decree came into force this year.[111] The Decree resembles other international developments, such as the European Union's General Data Protection Regulation (GDPR), aiming to reinforce regulations concerning the processing of personal data. However, unlike the GDPR, the Vietnamese Decree does not recognise the principle of 'legitimate interests' as a justification for the processing of personal data.[112]

Recommendations and Conclusion

The regional landscape of AI governance is evolving as governments and regulatory bodies acknowledge the importance of guardrails in AI development and use. As has been explored, economic ambitions and national priorities may ultimately determine whether countries will adopt 'holistic and hard-law based' approaches or 'sector-specific and soft-law based' approaches.

The intense proliferation of generative AI systems in 2023 has contributed to accelerating this aim. As AI continues to revolutionise industries and societies, developing and implementing comprehensive and forward-looking AI governance is crucial. Regional governments and regulatory bodies must work together to establish robust regulatory frameworks that address ethical considerations, data privacy, algorithmic bias, and other potential risks associated with AI. This report concludes with recommendations that can guide governments to ensure that their governance frameworks adopt the promise of AI:

1. **Undertake multi-stakeholder collaboration**: Multi-stakeholder collaboration can ensure that regulations are equitable, as well as increase public support and help identify potential risks associated with AI systems. Governments should place emphasis on engaging leaders from academia, industry and civil society to gain a diversity of perspectives concerning the responsible uses of AI systems. This may be accomplished by funding research on AI ethics and governance, or by creating multi-stakeholder forums. Singapore has demonstrated leadership on this front with initiatives such as AI Verify, which aims to assist organisations in verifying the effectiveness of their AI systems by drawing on the contributions of the global open-source community to improve its AI testing tools.[113]

2. **Maintain public trust**: The importance of the Asia-Pacific region as an active contributor to the evolution of safe and responsible AI governance cannot be underestimated. Public trust in AI technologies and adequate governance is essential to promote innovation and foster the adoption of AI technologies. Maintaining public trust may involve seeking public input on proposed regulations, reflected in Australia's recent move of soliciting public consultation on their paper *Safe and Responsible AI in Australia*.[114] Encouraging public engagement can improve the likelihood that regulations are fair and non-discriminatory, meaning they neither discriminate against any particular group nor are applied unequally across AI systems. Governments should also be clear about their objectives in governing and regulating AI and how they aim to proportionately address specific risks arising from AI technologies. Finally, implementing accountability methods needs to be adopted as a foundation for governance. This means developing a clear system for monitoring compliance, and for imposing responsibility on the face of potential risks.

3. **Participate in international forums and monitor regulatory developments in other jurisdictions**: While significant progress has been made in AI regulation globally, achieving unity and harmonisation remains a critical challenge. Collaboration and international harmonisation are necessary to ensure the responsible and ethical development and deployment of AI on a global scale. Initiatives like the Global Partnership of Artificial Intelligence ('GPAI') are promoting international collaboration and knowledge sharing among countries. The monitoring of developments in other jurisdictions can inspire governments while working on governance in their own context, illuminate important differences, and assist in the implementation of future regulations.

4. **Understand AI regulations as an iterative process: As** generative AI systems have recently demonstrated, the field of AI is constantly changing. This means that regulations need to be flexible enough to adapt to new technologies and new risks. Further, potential changes in public sentiment, and the plurality of opinions about how to 'properly' regulate or govern AI, underscore the importance of understanding the regulation of AI as an imperative process. Therefore, governments should ensure that their regulatory frameworks governing AI are open to experimentation. This may be accomplished in various ways, including creating regulatory sandboxes; using principles-based regulation such as fairness, equality, accountability and transparency; encouraging self-regulation; and remaining flexible to adapt efforts as needed. The need to adopt appropriate governance for current applications of artificial technology is of utmost importance, just as it is vital to govern future technology. It is not sufficient to focus solely on the present; instead, governments must adopt a forward-thinking approach, anticipating and preparing for the ways AI will shape our world in the future.

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